### **News Release**

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## Marijuana: The Myths Are Killing Us

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**APR 26--**When 14-year-old Irma Perez of Belmont, California, took a single ecstasy pill one evening last April, she had no idea she would become one of the 26,000 people who die every year from drugs. Irma took ecstasy with two of her 14-year-old friends in her home. Soon after taking the tiny blue pill, Irma complained of feeling awful and said she felt like she was "going to die." Instead of seeking medical care, her friends called the 17-year-old dealer who supplied the pills and asked for advice. The friends tried to get Irma to smoke marijuana, but when she couldn't because she was vomiting and lapsing into a coma, they stuffed marijuana leaves into her mouth because, according to news sources, "they knew that drug is sometimes used to treat cancer patients."

Irma Perez died from taking ecstasy, but compounding that tragedy was the deadly decision to use marijuana to "treat" her instead of making what could have been a lifesaving call to 911. Irma was a victim of our society's stunning misinformation about marijuana-a society that has come to believe that marijuana use is not only an individual's free choice but also is good medicine, a cure-all for a variety of ills. A recent poll showed that nearly three-fourths of Americans over the age of 45 support legalizing marijuana for medical use.<sup>3</sup>

It's a belief that has filtered down to many of our teens, if what I'm hearing during my visits with middle school and high school students across the country is true. I'm amazed at how well versed in drug legalization these teens are. It is as if legalization advocates stood outside their schools handing out their leaflets of lies. Here is what students have told me about marijuana: "It's natural because it grows in the ground, so it must be good for you." "It must be medicine, because it makes me feel better." "Since everybody says it's medicine, it is."

Legalization advocates themselves have alluded to the fact that so-called medical marijuana is a way of achieving wholesale drug legalization. A few years ago, the New York Times interviewed Ethan Nadelmann, director of the Lindesmith Center, a drug policy research center. Responding to criticism that the so-called medical marijuana issue is a stalking horse for drug legalization, Mr. Nadelmann did not disagree. "Will it help lead toward marijuana legalization?" he asked. "I hope so."

The issue of marijuana as medicine has captured the nation's attention and has now made its way to the U. S. Supreme Court, with Ashcroft v. Raich still pending. The natural extension of this myth is that, if marijuana is medicine, it must also be safe for recreational use. This pervasive mindset has even reached our courts. In January 2005, for example, Governor Frank Murkowski of Alaska had to ask the legislature "to overrule a court ruling that adult Alaskans have the right to possess marijuana for personal use in their homes." There was no pretense of medical use in this ruling; it gave Alaskans the legal right to smoke marijuana for any reason, lending credence to the belief that marijuana is not only safe to treat serious illness but somehow safe for general use and for all society.

What is the antidote? Spreading the truth. As a prominent spokesperson in your community, you have the opportunity and, I would argue, the responsibility to inform your neighbors. America is

not suffering from anything that the truth can't cure. To help you set the record straight, this article seeks to rebut the rhetoric and recap the reality.

# Myth: Marijuana is medicine.

## Reality: Smoked marijuana is not medicine.

The scientific and medical communities have determined that smoked marijuana is a health danger, not a cure. There is no medical evidence that smoking marijuana helps patients. In fact, the Food and Drug Administration (FDA) has approved no medications that are smoked, primarily because smoking is a poor way to deliver medicine. Morphine, for example has proven to be a medically valuable drug, but the FDA does not endorse smoking opium or heroin.

Congress enacted laws against marijuana in 1970 based in part on its conclusion that marijuana has no scientifically proven medical value, which the U.S. Supreme Court affirmed more than 30 years later in United States v. Oakland Cannabis Buyers' Cooperative, et al., 532 U.S. 483 (2001). Marijuana remains in schedule 1 of the Controlled Substances Act because it has a high potential for abuse, a lack of accepted safety for use under medical supervision, and no currently accepted medical value. I

The American Medical Association has rejected pleas to endorse marijuana as medicine, and instead urged that marijuana remain a prohibited schedule 1 drug at least until the results of controlled studies are in. The National Multiple Sclerosis Society stated that studies done to date "have not provided convincing evidence that marijuana benefits people with MS" and does not recommend it as a treatment. Further, the MS Society states that for people with MS "long-term use of marijuana may be associated with significant serious side effects."

The British Medical Association has taken a similar position, voicing "extreme concern" that downgrading the criminal status of marijuana would "mislead" the public into thinking that the drug is safe to use when, "in fact, it has been linked to greater risk of heart disease, lung cancer, bronchitis, and emphysema." 11

In 1999 the Institute of Medicine (IOM) undertook a landmark study reviewing the alleged medical properties of marijuana. Advocates of so-called medical marijuana frequently tout this study, but the study's findings decisively undercut their arguments. In truth, the IOM explicitly found that marijuana is not medicine and expressed concern about patients' smoking it because smoking is a harmful drug-delivery system. The IOM further found that there was no scientific evidence that smoked marijuana had medical value, even for the chronically ill, and concluded that "there is little future in smoked marijuana as a medically approved medication." In fact, the researchers who conducted the study could find no medical value to marijuana for virtually any ailment they examined, including the treatment of wasting syndrome in AIDS patients, movement disorders such as Parkinson's disease and epilepsy, or glaucoma.

The IOM found that THC<sup>13</sup> (the primary psychoactive ingredient in marijuana) in smoked marijuana provides only temporary relief from intraocular pressure (IOP) associated with glaucoma and would have to be smoked eight to 10 times a day to achieve consistent results. And there exists another treatment for IOP, as the availability of medically approved once- or twice-a-day eye drops makes IOP control a reality for many patients and provides round-the-clock IOP reduction.<sup>14</sup> For two other conditions, nausea and pain, the report recommended against marijuana use, while suggesting further research in limited circumstances for THC but not smoked marijuana.<sup>15</sup>

Before any drug can be marketed in the United States, it must undergo rigorous scientific scrutiny and clinical evaluation overseen by the FDA. For example, the FDA has approved Marinol (dronabinol)-a safe capsule form of synthetic THC that meets the standard of accepted medicine

and has the same properties as cultivated marijuana without the high- for the treatment of nausea and vomiting associated with cancer chemotherapy and for the treatment of wasting syndrome in AIDS patients.

The federal government has approved and continues to approve research into the possible use of marijuana as medicine and any new delivery systems of marijuana's active ingredients. To quote U.S. Supreme Court Justice Stephen Breyer's remarks during the November 2004 Raich oral argument, "Medicine by regulation is better than medicine by referendum." Proving that the regulatory process does work, DEA has registered every researcher who meets FDA standards to use marijuana in scientific studies. Since 2000, for example, the California-based Center for Medicinal Cannabis Research (CMCR) has gained approval for 14 trials using smoked marijuana in human beings and three trials in laboratory and animal models. This CMCR research is the first effort to study the medical efficacy of marijuana. But researchers have not endorsed smoking marijuana and instead are attempting to isolate marijuana's active ingredients to develop alternative delivery systems to smoking. Not one of these researchers has found scientific proof that smoke marijuana is medicine.

Myth: Legalization of marijuana in other countries has been a success.

Reality: Liberalization of drug laws in other countries has often resulted in higher use of dangerous drugs. Over the past decade, drug policy in some foreign countries, particularly those in Europe, has gone through some dramatic changes toward greater liberalization with failed results. Consider the experience of the Netherlands, where the government reconsidered its legalization measures in light of that country's experience. After marijuana use became legal, consumption nearly tripled among 18- to 20-year-olds. As awareness of the harm of marijuana grew, the number of cannabis coffeehouses in the Netherlands decreased 36 percent in six years. Almost all Dutch towns have a cannabis policy, and 73 percent of them have a notolerance policy toward the coffeehouses.<sup>20</sup>

In 1987 Swiss officials permitted drug use and sales in a Zurich park, which was soon dubbed Needle Park, and Switzerland became a magnet for drug users the world over. Within five years, the number of regular drug users at the park had reportedly swelled from a few hundred to 20,000. The area around the park became crime-ridden to the point that the park had to be shut down and the experiment terminated.<sup>21</sup>

Marijuana use by Canadian teenagers is at a 25-year peak in the wake of an aggressive decriminalization movement. At the very time a decriminalization bill was before the House of Commons, the Canadian government released a report showing that marijuana smoking among teens is "at levels that we haven't seen since the late '70s when rates reached their peak." After a large decline in the 1980s, marijuana use among teens increased during the 1990s, as young people apparently became "confused about the state of federal pot laws."

Myth: Marijuana is harmless.

#### Reality: Marijuana is dangerous to the user.

Use of marijuana has adverse health, safety, social, academic, economic, and behavioral consequences; and children are the most vulnerable to its damaging effects. Marijuana is the most widely used illicit drug in America<sup>24</sup> and is readily available to kids.<sup>25</sup> Compounding the problem is that the marijuana of today is not the marijuana of the baby boomers 30 years ago. Average THC levels rose from less than 1 percent in the mid-1970s to more than 8 percent in 2004.<sup>26</sup> And the potency of B.C. Bud,a popular type of marijuana cultivated in British Columbia, Canada, is roughly twice the national average-ranging from 15 percent THC content to 20 percent or even higher.<sup>27</sup>

Marijuana use can lead to dependence and abuse. Marijuana was the second most common illicit drug responsible for drug treatment admissions in 2002-outdistancing crack cocaine, the next most prevalent cause. Shocking to many is that more teens are in treatment each year for marijuana dependence than for alcohol and all other illegal drugs combined. This is a trend that has been increasing for more than a decade: in 2002, 64 percent of adolescent treatment admissions reported marijuana as their primary substance of abuse, compared to 23 percent in 1992.

Marijuana is a gateway drug. In drug law enforcement, rarely do we meet heroin or cocaine addicts who did not start their drug use with marijuana. Scientific studies bear out our anecdotal findings. For example, the Journal of the American Medical Association reported, based on a study of 300 sets of twins, that marijuana-using twins were four times more likely than their siblings to use cocaine and crack cocaine, and five times more likely to use hallucinogens such as LSD. Turthermore, the younger a person is when he or she first uses marijuana, the more likely that person is to use cocaine and heroin and become drug-dependent as an adult. One study found that 62 percent of the adults who first tried marijuana before they were 15 were likely to go on to use cocaine. In contrast, only 1 percent or less of adults who never tried marijuana used heroin or cocaine.

Smoking marijuana can cause significant health problems. Marijuana contains more than 400 chemicals, of which 60 are cannabinoids. Smoking a marijuana cigarette deposits about three to five times more tar into the lungs than one filtered tobacco cigarette. Consequently, regular marijuana smokers suffer from many of the same health problems as tobacco smokers, such as chronic coughing and wheezing, chest colds, and chronic bronchitis. In fact, studies show that smoking three to four joints per day causes at least as much harm to the respiratory system as smoking a full pack of cigarettes every day. Marijuana smoke also contains 50 to 70 percent more carcinogenic hydrocarbons than tobacco smoke and produces high levels of an enzyme that converts certain hydrocarbons into malignant cells.

In addition, smoking marijuana can lead to increased anxiety, panic attacks, depression, social withdrawal, and other mental health problems, particularly for teens. Research shows that kids aged 12 to 17 who smoke marijuana weekly are three times more likely than nonusers to have suicidal thoughts. Marijuana use also can cause cognitive impairment, to include such short-term effects as distorted perception, memory loss, and trouble with thinking and problem solving. Students with an average grade of D or below were found to be more than four times as likely to have used marijuana in the past year as youths who reported an average grade of A. For young people, whose brains are still developing, these effects are particularly problematic and jeopardize their ability to achieve their full potential.

### Myth: Smoking marijuana harms only the smokers.

## Reality: Marijuana use harms nonusers.

We need to put to rest the thought that there is such a thing as a lone drug user, a person whose habits affect only himself or herself. Drug use, including marijuana use, is not a victimless crime. Some in your communities may resist involvement because they think someone else's drug use is not hurting them. But this kind of not-my-problem thinking is tragically misguided. Ask those same people about secondhand smoke from cigarettes, and they'll quickly acknowledge the harm that befalls nonsmokers. Secondhand smoke is a well-known problem, one that Americans are becoming more unwilling to bear. We need to apply the same common-sense thinking to the even more pernicious secondhand effects of drug use.

Take for instance the disastrous effects of marijuana smoking on driving. As the National Highway Traffic Safety Administration (NHTSA) noted, "Epidemiology data from . . . traffic arrests and fatalities indicate that after alcohol, marijuana is the most frequently detected psychoactive substance among driving populations." Marijuana causes drivers to experience decreased car

handling performance, increased reaction times, distorted time and distance estimation, sleepiness, impaired motor skills, and lack of concentration. 43

The extent of the problem of marijuana-impaired driving is startling. One in six (or 600,000) high school students drive under the influence of marijuana, almost as many as drive under the influence of alcohol, according to estimates released in September 2003 by the Office of National Drug Control Policy (ONDCP).<sup>44</sup> A study of motorists pulled over for reckless driving showed that, among those who were not impaired by alcohol, 45 percent tested positive for marijuana.<sup>45</sup>

For those of you who patrol streets and highways, you know that the consequences of marijuana-impaired driving can be tragic. For example, four children and their van driver-nicknamed Smokey by the children for his regular marijuana smoking-died in April 2002 when a Tippy Toes Learning Academy van veered off a freeway and hit a concrete bridge abutment. He was found at the crash scene with marijuana in his pocket. 46

Some such drug-impaired drivers will be detected through the Drug Recognition Expert program, which operates under the direction of the IACP and is supported by NHTSA. 47 However, if we are to bolster cases against drugged drivers, greater protection for innocents on the road requires the development of affordable roadside drug detection tests, and some are in the testing phase now.

Secondhand smoke from marijuana kills other innocents as well. Last year, two Philadelphia firefighters were killed when they responded to a residential fire stemming from an indoor marijuana grow. In New York City, an eight-year-old boy, Deasean Hill, was killed by a stray bullet just steps from his Brooklyn home after a drug dealer sold a dime bag of marijuana on another dealer's turf.

### Chief: Help Spread the Truth about Marijuana

Debunking these myths and arming our young people and their parents with the facts do work. We have proof. It came in the form of good news from the Monitoring the Future survey that reveals that marijuana use has dropped 36 percent among eighth graders since 1996, and modestly declined among 10th and 12th graders. It is no coincidence that while marijuana use declined, the proportion of students perceiving marijuana use as dangerous increased. "Quite possibly, the media campaign aimed at marijuana use that has been undertaken by ONDCP, in collaboration with the Partnership for a Drug Free America, has been having its intended effect," University of Michigan researcher Lloyd Johnston, the study's principal investigator, said. Esearch also shows that parental disapproval can prevent teen drug use. Most young people (89 percent) reported that their parents strongly disapprove of their trying marijuana. Among these youths, only 5 percent had used marijuana in the past month.

Spread the truth. Join with your community leaders. Clear the smokescreen by educating the children, parents, teachers, physicians, and legislators in your community before the myths kill any more Irma Perezes or Deasean Hills.

### References:

- 1. Centers for Disease Control and Prevention, "Deaths: Final Data for 2002," National Vital Statistics Reports, vol. 53, no. 5: 11.
- 2. Matthew B. Stannard, "Ecstasy Victim Told Friends She Felt Like She Was 'Going to Die,"San Francisco Chronicle, May 4, 2004.
- 3. Elizabeth Wolfe, "AARP Finds Support for Medical Marijuana," (Baton Rouge) Advocate, December 19, 2004.
- 4. Christopher Wren, "Small but Forceful Coalition Works to Counter U.S. War on Drugs," New York Times, January 2, 2000.

- Ashcroft v. Raich, et al., 352 F.3rd 1222 (9th Cir. 2003), cert. granted, June 28, 2004, No. 03-1454.
- 6. Sean Cockerham, "Governor Moves to Change Pot Law," Anchorage Daily News, January 22, 2005.
- 7. 21 U.S.C. 812(b)(1).
- 8. American Medical Association, Policy H-95.952 Medical Marijuana.
- 9. National Multiple Sclerosis Society Information Sourcebook, available at (<a href="www.nationalmssociety.org/pdf/sourcebook/marijuana.pdf">www.nationalmssociety.org/pdf/sourcebook/marijuana.pdf</a>).
- 10. National Multiple Sclerosis Society Information Sourcebook.
- 11. "Doctors' Fears at Cannabis Change," BBC News, January 21, 2004.
- 12. Institute of Medicine, "Marijuana and Medicine: Assessing the Science Base" (1999): 159, 178.
- 13. Delta-9-tetrahydrocannabinol.
- 14. Institute of Medicine, "Marijuana and Medicine": 173-177.
- 15. Institute of Medicine, "Marijuana and Medicine": chapter 4 and summary. A single narrow exception was the recommendation that short-term use of smoked marijuana of less than six months should be considered under closely monitored and documented conditions for potential use by terminal cancer and AIDS patients, for whom it said the benefits might outweigh the harms of smoking marijuana. See page 179.
- 16. Raich, supra, oral argument transcript, 50-51.
- 17. CMCR, National Advisory Council Conference Call, November 19, 2004.
- 18. CMCR Mission Statement, available at (<a href="www.cmcr.ucsd.edu/geninfo/mission.htm">www.cmcr.ucsd.edu/geninfo/mission.htm</a>).
- 19. DEA Office of Diversion Control.
- 20. White House Office of National Drug Control Policy, "What Americans Need to Know about Marijuana," 10; Dutch Health, Welfare, and Sports Ministry, report, April 23, 2004; University of Tilburg (Netherlands), "Coffeeshops in the Netherlands 2003," September 2004.
- 21. Roger Cohen, "Amid Growing Crime, Zurich Closes a Park It Reserved for Drug Addicts," New York Times, February 11, 1992.
- 22. Janice Tibbetts, "More Teens Getting Stoned," Ottawa Citizen, October 29, 2003.
- 23. Janice Tibbetts, "More Teens Getting Stoned."
- 24. Of the nearly 20 million current illicit drug users, 14.6 million (about 75 percent) are using marijuana. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2003 National Survey on Drug Use and Health (2004).
- 25. U.S. Department of Health and Human Services, National Institutes of Health, "Monitoring the Future National Results on Adolescent Drug Use: Overview of Key Findings," NIH publication 04-55062003, by L. D. Johnston, et al. (2004): 10.
- 26. White House Office of National Drug Control Policy, quarterly report (University of Mississippi Potency Monitoring Project), no. 87 (November 8, 2004): figure 1C and figure 2.
- 27. Drug Enforcement Administration, (www.dea.gov).
- 28. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, Treatment Episode Data Set, National Admissions to Substance Abuse Treatment Services, 1992-2002: 39, table 3.1b, 119.
- 29. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, Treatment Episode Data Set, National Admissions to Substance Abuse Treatment Services, 1992-2001: table 5.1a, table 5.1b, 156-157.
- 30. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, "Adolescent Treatment Admissions: 1992 and 2002," Drug and Alcohol Services Information System (DASIS) Report (October 15, 2004).

- 31. White House Office of National Drug Control Policy, "What Americans Need to Know about Marijuana," 9.
- 32. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Initiation of Marijuana Use: Trends, Patterns and Implications, by Joseph C. Gfroerer, et al. (July 2002): 62.
- 33. Statement by Nora D. Volkow, M.D., director of the National Institute on Drug Abuse on "Marijuana and Medicine: The Need for a Science-Based Approach" before the House Committee on Government Reform, Subcommittee on Criminal Justice, Drug Policy, and Human Resources, U.S. House of Representatives, April 1, 2004.
- 34. T. C. Wu, et al., "Pulmonary Hazards of Smoking Marijuana as Compared with Tobacco," New England Journal of Medicine 318 (1988): 347-351; cited in White House Office of National Drug Control Policy, Marijuana Myths & Facts, 9.
- 35. National Institute on Drug Abuse, "NIDA Info Facts: Marijuana" (MARCH 2005): 3.
- 36. D. P. Tashkin, "Pulmonary Complications of Smoked Substance Abuse," Western Journal of Medicine 152 (no. 5) (1990): 525-530; cited in White House Office of National Drug Control Policy, Marijuana Myths & Facts, 9.
- 37. National Institute on Drug Abuse, "NIDA Info Facts: Marijuana": 3.
- 38. J. S. Brook, et al., "The Effect of Early Marijuana Use on Later Anxiety and Depressive Symptoms," NYS Psychologist (2001): 35-39; cited in White House Office of National Drug Control Policy, Marijuana Myths & Facts, 4.
- 39. J. Greenblatt, "Adolescent Self-Reported Behaviors and Their Association with Marijuana Use," based on data from SAMHSA National Household Survey on Drug Abuse, 1994-1996 (1998); cited in White House Office of National Drug Control Policy, Marijuana Myths & Facts, 4.
- 40. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, National Household Survey on Drug Abuse, "Marijuana Use among Youth" (July 19, 2002); cited in White House Office of National Drug Control Policy, Marijuana Myths & Facts, 3.
- 41. White House Office of National Drug Control Policy, Marijuana Myths & Facts, 3-4.
- 42. U.S. Department of Transportation, National Highway Traffic Safety Administration, "Drugs and Human Performance Fact Sheets," by Fiona J. Couper and Barry K. Logan (March 2005).
- 43. U.S. Department of Transportation, National Highway Traffic Safety Administration, "Drugs and Human Performance Fact Sheets."
- 44. White House Office of National Drug Control Policy, "Marijuana and Kids: Steer Clear of Pot," fact sheet.
- 45. White House Office of National Drug Control Policy, "White House Drug Czar Launches Campaign to Stop Drugged Driving," press release, citing the New England Journal of Medicine.
- 46. Aimee Edmondson, "Drug Tests Required of Child Care Drivers-Fatal Crash Stirs Change; Many Already Test Positive," (Memphis) Commercial Appeal, July 2, 2003.
- 47. See Chuck Hayes, "Drug Recognition Experts: A Public Safety Resource," The Police Chief 70 (October 2003): 103-106.
- 48. David B. Caruso, "Murder Charged in Blaze that Killed Two Firefighters," Associated Press, August 21, 2004.
- 49. Alisha Berger, et al., "Tragic 'Pot' Shots," New York Post, November 19, 2003.
- 50. Monitoring the Future, "Overall Teen Drug Use Continues Gradual Decline," University of Michigan News Service press release (December 21, 2004): 2; available at (www.monitoringthefuture.org).
- 51. Monitoring the Future, "Overall Teen Drug Use": 2.
- 52. Monitoring the Future, "Overall Teen Drug Use": 2.

53. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2003 National Survey on Drug Use and Health:

National Findings: 4.